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Give Me a Good Reason: Exploring Tightness-Looseness as a Framework for Norms-Nudges

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Give Me a Good Reason: Exploring Tightness-Looseness as a Framework for Norms-Nudges

Abstract

Identifying a relevant and specific reference group can often prove challenging when designing a norm-nudge, but not including a relevant reference group can also potentially cause a norm-nudge to backfire even when there are appeals to high social proximity. A potential solution explored in this capstone is incorporating tight-loose frameworks in normative messages as a means of evoking a sense of social proximity without necessarily specifying a reference group. A pilot study examining charitable giving using these tight-loose frameworks is conducted to see whether adding these frameworks increases pro-social norm compliance. While preliminary results suggest that there is no significant difference in norm compliance when a tight-loose framework is used, there is some evidence which suggests that presenting tightly (loosely) framed messages to tightly (loosely)-minded individuals may increase the likelihood that they will donate to the charity. Future research on the importance of tightness-looseness as a context to consider when designing norm-nudges is encouraged.

Disciplines

Social and Behavioral Sciences

*GIVE ME A GOOD REASON: EXPLORING TIGHTNESS-LOOSENESS AS A
FRAMEWORK FOR NORM-NUDGES*

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Summer 2019

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ABSTRACT

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FRAMEWORK FOR NORM-NUDGES

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Identifying a relevant and specific reference group can often prove challenging when designing a norm-nudge, but not including a relevant reference group can also potentially cause a norm-nudge to backfire even when there are appeals to high social proximity. A potential solution explored in this capstone is incorporating tight-loose frameworks in normative messages as a means of evoking a sense of social proximity without necessarily specifying a reference group. A pilot study examining charitable giving using these tight-loose frameworks is conducted to see whether adding these frameworks increases pro-social norm compliance. While preliminary results suggest that there is no significant difference in norm compliance when a tight-loose framework is used, there is some evidence which suggests that presenting tightly (loosely) framed messages to tightly (loosely)-minded individuals may increase the likelihood that they will donate to the charity. Future research on the importance of tightness-looseness as a context to consider when designing norm-nudges is encouraged.

Introduction

Norm-interventions or “norm-nudges” have increasingly become a popular behavioral approach in public policy to encourage individuals or groups to adopt beneficial practices and abandon harmful behaviors. Its appeal partially lies in the simple and economical way that nudges can be designed and implemented. However, unlike many traditional nudges, norm-nudges rely on social norms, i.e. providing social information or eliciting social expectations, to elicit the desired behavior. This often means that in order for norm-nudges to work effectively, careful consideration needs to be given towards how best to convey such social information. An especially important point of consideration is the reference group in which the normative message is associated; this is because reference groups tend to be the strongest influence on behavior. Intuitively this makes sense since what others do or think one should do exerts a stronger influence on someone if they are more similar to that individual.

Some dimensions commonly considered in determining a proper reference group include one’s gender, ethnic group, and religious or political community (Bicchieri & Dimant, 2019). Other aspects of one’s cultural identity such as their affinity for a sports team can also influence how receptive they are to others’ behavior. For example, when a Phillies fan observed the behavior of fellow Phillies fans, they tended to be more influenced by pro-social behaviors than when their affinity for the Phillies was unknown, which helped to curb the pro-social norm of donating to a charity from eroding (Bicchieri et al., 2019). This particular result is interesting since it suggests that introducing social proximity to a norm-nudge can potentially elicit some similar effects of norm compliance expected when a proper reference group is assigned to a norm-intervention. To the extent that being a fan of the Phillies constitutes a “proper” reference group in the context of donating or taking from a charity may be a topic of debate, but it does

raise an interesting question regarding the role that social proximity has on encouraging positive behavior contagion. However, it appears that social proximity alone cannot always promote norm compliance, as merely informing others that they are higher in social proximity to another person they are observing the behavior of not only does not increase pro-social norm compliance but amplifies the contagion of anti-social behavior (Dimant, 2019).

Identifying a relevant and specific reference group can often prove challenging when designing a norm-nudge, but not including a relevant reference group can also potentially cause a norm-nudge to backfire even when there are appeals to high social proximity. Perhaps a potential solution to this can be to incorporate tightness-looseness in norm-interventions as a means of evoking a sense of high social proximity without necessarily needing to mention a specific reference group. The idea of tightness-looseness (TL), or the variation in strength of social norms and tolerance of deviant behavior, is an interesting framework in which to understand cultural variation (Gelfand et al., 2011). In particular, TL seems to be a pervasive cultural force shaped from distal historical and ecological events that impacts countries, organizations, and even individuals alike (Gelfand, Nishii, & Raver, 2006). To the extent that TL impacts individual-level decisions, existing literature demonstrates how marketing strategies vary advertising themes to appeal to tighter or looser values that individuals may hold as a result of living in tight or loose environments and adopting their respective cultures (Li, Gordon & Gelfand, 2017). Other previous literature also confirms that living in a tight versus loose environment is likely to cultivate and reinforce the expression of certain psychological traits, e.g. agreeableness, conscientiousness, etc., which are adaptive and reinforce the strength of norms in that context (Gelfand et al., 2011; Harrington & Gelfand, 2014).

Related to this, existing research has suggested that TL can also affect how responsive people are to norm-interventions (Li, Gordon & Gelfand, 2017) by framing such normative messages to reflect a tighter or looser focus. Thus, in trying to further understand how best to design norm-interventions, it may be worthwhile to understand how framing a norm as tight or loose can encourage higher norm compliance among similarly tight or loose subpopulations. In one aspect, it will be interesting to examine whether the TL of individuals can serve as an influential dimension of social similarity that can help mitigate a lack of a specific reference group. In another aspect, it will examine whether adding a (tight or loose) rationale to an otherwise basic normative message can substantiate it by both establishing credibility—another issue that norm-nudges tend to fail (Bicchieri & Dimant, 2019)—and appealing to one’s moral identity. Therefore, the main research question at hand is to examine whether adding a tight-loose framework to a descriptive norm encourages more (pro-social) norm-compliance as opposed to one without a tight-loose framework. A related question to this will be to see whether consistency between a tight-loose message and an individual’s own tight-loose mindset increases norm compliance.

Research Scope

Conducting studies that involve a cross-cultural component is often complicated to test because of other factors that account for cross-cultural differences, e.g. whether a country is individualistic or collectivistic. Thus, the scope of this study was limited to just the United States (U.S.), and only participants from or currently residing within the U.S. were recruited. In general, the U.S. ranks as a loose nation (Gelfand et al., 2011). This is not to say, however, that the U.S. is homogenously loose across states. Tightness-looseness varies within the U.S. just as

tightness-looseness varies across countries, largely because states had to adapt to different distal ecological and historical threats, e.g. resource scarcity, disease, and environmental threats (Harrington & Gelfand, 2014). For example, states along the West coast—such as California, Oregon, and Washington—are among the loosest states, while states in the South—Texas, Mississippi, and Alabama—are among the tightest states. Therefore, while the study scope was limited to just the U.S., the variation in tightness-looseness within the U.S. served as an interesting context in which to test the research question. Generally speaking, however, it may be unsurprising that a loose framework will generally resonate more with participants based in the U.S. as a whole, and thus be more effective in increasing charitable giving compared to having a neutral framework.

The norm-intervention used in this study was also limited to using descriptive norms only, rather than both descriptive and injunctive norms. Generally speaking, existing literature has suggested that on a cross-country level, looser nations like the U.S. respond more effectively to descriptive norms, while injunctive norms tend to be met with backlash (Li, Gordon & Gelfand, 2017). This may be because injunctive norms may make people (from loose nations) feel as though they are being coerced into making certain decisions (Jacobson, Mortenson, & Cialdini, 2011; Melnyk, Herpen, Fischer, & van Trijp, 2011). It may also be the case that injunctive norms do not imply that most people actually act accordingly to the norm (Bicchieri, Dimant, Sonderegger, 2019). Future studies, however, may find it worthwhile to test how the effects of adding a tight-loose framework to both descriptive and injunctive norms may be similar or different.

Study Design

An overview of the study design follows below. Because the study utilizes normative messaging, a norm elicitation experiment was necessary to measure empirical expectations and rationales behind donating to charity; the results from this was then used to validate the descriptive norms used in the main study conditions.

For the purposes of this capstone, this study was piloted and preliminary data was collected. Participants were primarily recruited via online platforms, e.g. the subreddit r/SampleSize. Participants were compensated in the form of raffle tickets—with the potential to earn bonus tickets—towards a \$50 Amazon gift card. Responses were collected anonymously, and participants had the choice of whether or not to include their e-mail at the end of the survey to be contacted about the raffle results.

Norm Elicitation Experiment

The procedure utilized to elicit empirical expectations was drawn from the one used in Bicchieri & Chavez (2010) as well as Bicchieri et al. (2019). Subjects were provided a description of the instructions that were given to participants in the main study. These instructions stated that participants in the main study were each given \$1.00 in which they could choose to donate all, some, or none of the \$1.00 towards a real charity, Direct Relief. Subjects were then asked to guess what the majority of these previous participants chose to do. If subjects chose that the majority of past participants donated some amount less than \$1.00 or donated \$1.00, they were then asked to select which reason(s) they thought contributed to the past participants' decisions. Additionally, if subjects chose that most past participants donated some amount less than \$1.00, they were asked to estimate how much these participants donated.

Main Behavioral Experiment

The actual experiment, which looked at how participants actually behaved when confronted with the charity instructions, was broken down into roughly three sections as illustrated by Figure 1. The three sections were introduced sequentially and, although the participants were aware that the study consisted of multiple parts, the details of each new part were only revealed upon completion of the previous parts.

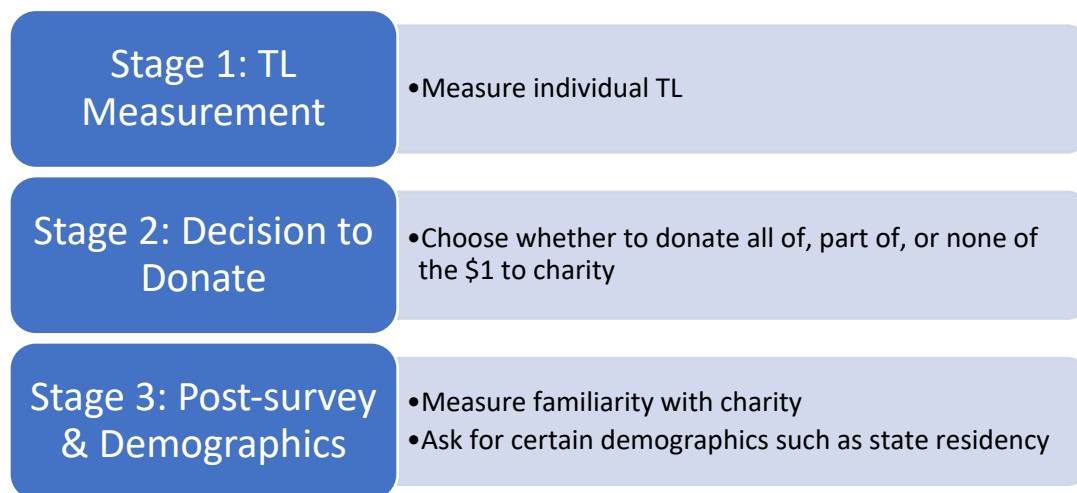


Figure 1. Brief Summary of Main Experiment.

Stage 1 – Measure tightness-looseness

At the beginning of the experiment, participants were asked to evaluate the accuracy of 20 statements as it applied to themselves. Statements included measures of conscientiousness and adaptability, e.g. “I hate to change my plans at the last minute” or “I rush into things”. This was to measure, on an individual level, how tight or loose their mindset was. The questionnaire itself was developed by Michele Gelfand for the purpose of measuring tightness-looseness of an individual’s mindset and is freely accessible on her website. One limitation of using this measurement is that there was no way to replicate the scoring with complete accuracy as it was

not public information. The best alternative was to code the questionnaire in a way that replicated the direction of scoring, i.e. the tightest responses received the highest points, so that higher scores reflect a tighter mindset.

Assessing state-level tightness-looseness was also considered, but because there was no official measure in existing literature, participants were asked in the demographics section what state they were from or currently reside. Based on these results, it would then be possible to “measure” how tight or loose the participants’ states were by comparing it to the U.S. state tightness-looseness index compiled by Harrington & Gelfand (2014). While somewhat of an imperfect measure, considering that a participant’s perception of their state’s tightness-looseness may differ from how states rank on the tightness-looseness index (based on archival data), this still allows for a way to see if there is any consistency between state-level and individual-level tightness looseness.

Stage 2 – Decision to donate

Participants were then told that they had received a \$1.00 bonus in which they could donate all, a portion of, or none of their \$1.00 bonus to a real charity that they would read about in the next page. All participants then read a description of the mission statement of the charity—Direct Relief—before proceeding to the next page in which they would read the descriptive norm and choose whether to donate, and if so, how much to donate. In each condition, participants were presented with the same basic descriptive norm, e.g. “In a previous study, the majority of participants donated to this charity”, but the rationale statement that followed it differed depending on the condition. In the treatment conditions, a tight-loose framework was incorporated into the rationale portion of the descriptive norm.

The specific framing for the rationale was drawn from Li, Gordon & Gelfand (2017), in which they discussed how tightness-looseness as applied to consumer behavior research can be seen in how advertising themes and persuasion tactics differ across tight and loose nations. For example, advertising themes in tight cultures tend to be prevention focused and feature more uniformity and norm abidance, while loose cultures are focused on promotion of ideals, permissiveness, and norm deviance. To avoid deception from generating new rationale statements, the rationale used for all conditions were drawn from the mission of Direct Relief. Different statements which reflected more tightness or looseness within the mission were selected and emphasized for the two treatment conditions. The three conditions are as follows:

- *Control*: Descriptive norm + Neutral framework
- *Treatment 1 (Tight)*: Descriptive norm + Tight framework
- *Treatment 2 (Loose)*: Descriptive norm + Loose framework

In the control condition, the rationale chosen to support the descriptive norm was that Direct Relief “provides medical resources quickly to affected areas” (“Direct Relief Mission Statement,” 2019). This was the closest neutral rationale statement that was found within the mission statement as it neither appealed to tight nor loose themes, e.g. group cohesion, diversity, etc.

In the first treatment condition (Tight), the rationale chosen was drawn from a description of Direct Relief’s mission as featured in a spotlight on the charity (Kae, 2018). Specifically, the rationale was that Direct Relief “works together with close knit communities to prevent these affected areas from deteriorating further,” which emphasized certain tight themes such as group cohesion and prevention from negative outcomes. In the second treatment condition (Loose), the rationale chosen was that Direct Relief “helps improve people’s lives regardless of their politics,

religion, or ability to pay” (“Direct Relief Mission Statement,” 2019). This statement featured loose themes such as diversity of individuals and promotion of positive outcomes.

Directly below each descriptive norm, participants read the main outcome question, which was whether to donate their \$1.00 bonus or not, and if so, how much. This was mostly to prevent participants from the possibility of intentionally or unintentionally misremembering the norm. Participants were allowed a full action space, e.g. to donate from \$0.00 to \$1.00, as to avoid losing participants who would have donated some amount that was not included in a restricted action space.

Stage 3 – Post-survey

In this concluding section, participants were asked whether they were familiar with Direct Relief and if they had donated to it before. Basic demographic questions were also asked, with the state in which the participant is from or currently resides in being of particular intrigue. As stated above, this was to examine if state-level and individual-level tightness-looseness was broadly consistent, e.g. if state-level TL influences one’s own TL (as suggested in previous literature on TL). Additionally, this was also to see if there may be any correlation between state-level TL and state-level charitable giving.

Payment

For the purposes of piloting this study, all participants were compensated with raffle tickets towards a \$50 Amazon gift card with the potential to earn bonus tickets. Participants in the norm elicitation experiment received 25 raffle tickets for participating and had the opportunity to earn up to 15 bonus tickets depending on their answers. Participants in the main experiment received 20 raffle tickets for participating and had the opportunity to earn up to 20

bonus raffle tickets. In particular for the main experiment, bonus tickets were converted based on the amount that participants kept from whatever they did not donate of their \$1.00 bonus. The conversion rate was 1 bonus ticket for every \$0.05 kept. This conversion rate was chosen to avoid the potential of overvaluing the \$1.00 bonus in terms of bonus raffle tickets. For example, if the conversion rate gave 10 bonus tickets for every \$0.05 kept, then participants would be able to earn up to 200 bonus tickets, which might serve as an appealing incentive to keep all of the \$1.00 bonus. However, participants may also not have valued raffle tickets which offer an uncertain monetary incentive (as compared to a certain monetary incentive), and thus were willing to donate more of their \$1.00 bonus. This latter point suggests that the preliminary results may serve as a liberal test for when this study is run again later with real monetary compensation.

Hypotheses

The hypotheses presented in this section builds on concepts discussed in existing literature on norm-nudges and on tightness-looseness. The first hypothesis is as follows:

***H₁:** Norm compliance increases when a tight-loose framework is included in the descriptive norm, as compared to having only a neutral framework.*

In a similar vein to effective marketing communications aimed at changing consumer behavior (Harmon-Kizer et al., 2013), Li, Gordon, and Gelfand (2017) argue that normative messages, beyond having a normative appeal, need to be framed in a way that fits the self-guides of individuals in order to be effective in persuading these individuals to adopt a certain behavior. To the degree that TL may shape the self-guides—or social identities—of individuals, it may be the

case that framing a normative message using tight or loose themes may appeal more broadly to the self-guides that people may hold concerning donating to charities. This also leads to the second hypothesis, which extends this notion:

H₂: A tight (loose) framework is more effective in increasing norm compliance for those with tighter (looser) mindsets.

This again follows the thought that certain appeals framed in a way consistent with the self-guides of individuals are more likely to be effective (Harmon-Kizer et al., 2013).

Preliminary Results

Norm-elicitation experiment

For the norm elicitation task, 36 subjects completed the survey. An overwhelming majority of subjects, roughly 94%, expected a majority of participants in the study to give to the charity, with roughly 56% of the total number of participants expecting that a majority of participants to donate the full \$1.00 bonus. In terms of what subjects expected the majority of participants to choose as their reason(s) for donating, the most frequent reason chosen was the “loose” rationale (61% of subjects), followed by the “neutral” rationale (47%), and lastly by the “tight” rationale (31%).

Behavioral Experiment

For the main behavioral experiment, 39 subjects were randomly assigned to one of the treatment conditions (control, tight, and loose). The average duration for the study was less than 6 minutes. Table 1 and Figure 2 below provide some more details regarding descriptive statistics and the frequency of amount donated by condition, respectively.

	Treatments		
	<i>Control</i>	<i>Tight</i>	<i>Loose</i>
Total Participants	12	14	13
Female	83%	57%	54%
Age (average)	31.7	28.0	25.7

Table 1. Descriptive statistics.

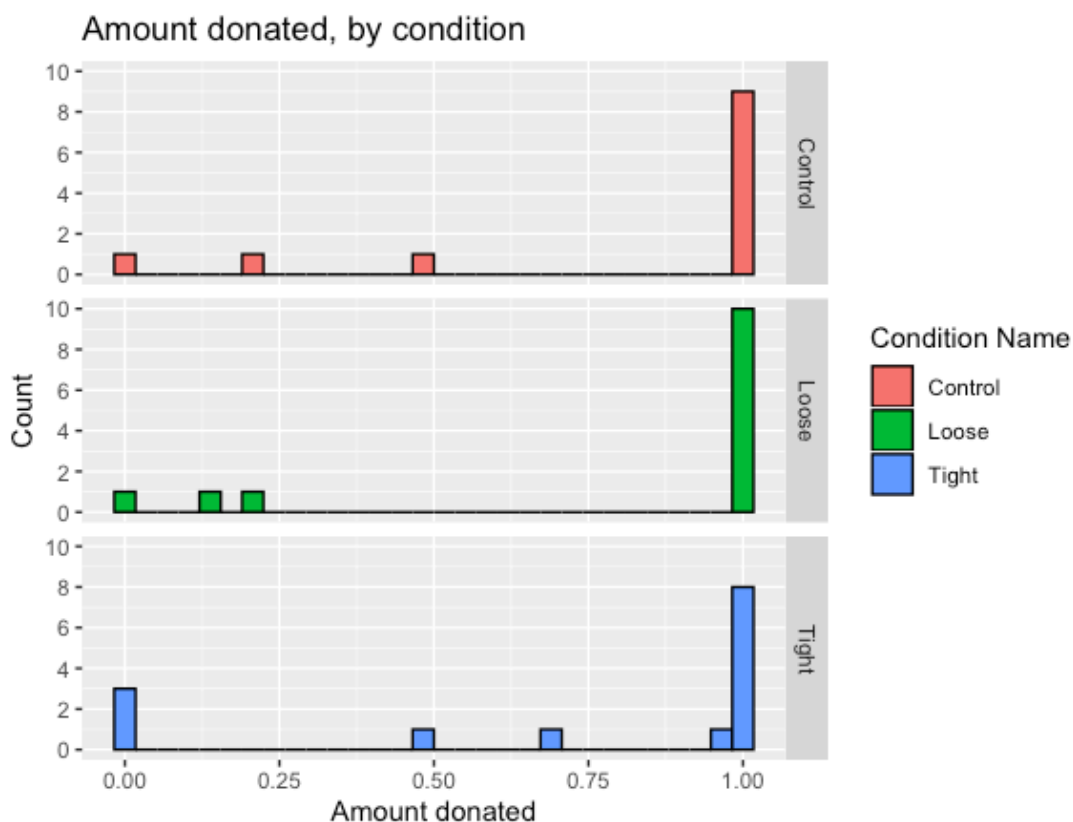


Figure 2. Amount donated, by condition.

Across the three conditions, 69% of subjects chose to donate the full \$1.00 bonus they received; broken down by condition, 75% of subjects chose to donate \$1.00 in the control condition, 77% of subjects chose to donate \$1.00 in the loose condition, and 57% of subjects chose to donate \$1.00 in the tight condition. This break down of donation frequency mirrors the

general trend observed from the norm elicitation experiment with regards to the frequency of reasons chosen; participants in the loose condition had the highest frequency of donating the full \$1.00 while those in the tight condition had the lowest frequency of donating the full \$1.00.

Overall, however, there appears to be insufficient evidence to support the main hypothesis (H1) as there are no significant differences in the amount donated and the framing used in the normative message. A one-way ANOVA and Kruskal-Wallis test were conducted, both with statistically insignificant results ($p=0.84$ and $p=0.55$ respectively).

A logistic regression was also run to test for H2 which essentially examines the interaction between a person's TL and their receptiveness towards a consistently tight or loose framing. In the case of the individual TL assessment used by Gelfand, a higher score (max of 100) represents a tighter mindset. Though the interaction between TL score and tight-loose framing is statistically insignificant ($p=0.49$ and $p=0.45$ respectively), the direction of effect is consistent with H2 and with what Li, Gordon, & Gelfand (2017) predict. Specifically, as TL scores increase, or an individual has a tighter mindset, they are less likely to donate to the charity when presented with a loose message framing. On the other hand, if an individual has a tighter mindset, they are more likely to donate to the charity. The regressions results can be found below in Table 2.

	<i>Dependent variable:</i>
	<i>'Amount donated'</i>
TL Score	0.086 (0.190)
Loose Condition	15.562 (19.676)
Tight Condition	-11.243 (16.476)
Age	0.153* (0.084)
Male	-0.386 (1.042)
Other (Gender)	0.171 (1.736)
TL Score x Loose Condition	-0.214 (0.279)
TL Score x Tight Condition	0.165 (0.237)
Constant	-8.686 (13.829)
Observations	39
<i>Note:</i>	*p**p***p<0.01

Table 2. Logistic regression results.

Discussion

Of course, given the rather low sample size for this main experiment, these results may differ once run on a larger scale. However, these preliminary results do seem to suggest that framing normative messages differently in a tight or loose way may not have much effect in influencing one's decision to donate. It may be the case that subjects may be ignoring the social information being provided, which Dimant, van Kleef, and Shalvi (2019) find may be the case in

these types of experiments. It may also be the case that the framings used for the rationales do not make tight or loose values salient enough to have any noticeable effect on norm compliance.

In terms of next steps, it may be worthwhile to explore whether the addition of a rationale to a normative message itself can increase norm compliance. In the current study, the control condition utilized framed the rationale in a neutral way; however, there was no baseline control condition where no rationale was included at all. Perhaps a fourth condition can be considered where only the basic descriptive norm is presented. The framings used may also need to be adjusted. In particular, the tight rationale seemed to be an overall weak reason to persuade subjects to donate based on both the norm elicitation and behavioral experiments. It would also be ideal to be able to successfully reach Gelfand to ask about the scoring for her individual mindset assessment.

Conclusions

As norm-nudges become an increasingly popular type of behavioral intervention used in public policy, it will be important to explore in more detail how best to design them depending on the issue and context. Tightness-looseness is one potentially important context in which to consider when designing such norm-interventions as it may influence how receptive people are to normative information in general. While this capstone is merely one step in attempting to understand the intricacies behind conveying social information effectively, I am hopeful that our collective understanding of norm-interventions will increase for the better in the near future.

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